

Nexans

Contractor: Nexans, Norway.

This application provides real-time simulation and control of Remote Operated Vehicles (Spider2000 and CapJet) through VR4MAX VR software integrated with LabView. The ROV's which are mostly invisible to the operator while operating subsea at great depth are used for trenching/burying of off-shore cables and pipelines.

The virtual model is synchronized in real time by over a 100 signals from the ROV and serves as the user interface to the ROV. The VR-version of the ROV operates at a digital terrain model (DTM) of the sea bed obtained by sonar. The excavation is made visible in this DTM, providing colour feedback when reaching desired depth. Designed for the Ormen Lange, SnOvit LNG Project in the Barents Sea, it successfully operates in other regions as well.